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09/835,837	04/16/2001	Mark Vange	CIRC027	4183

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EXAMINER	
NEURAUTER, GEORGE C	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/835,837	VANGE ET AL.	
	Examiner	Art Unit	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-19 are currently pending and have been examined.

Response to Arguments

Applicant's arguments filed 7 April 2005 have been fully considered but they are not persuasive.

In regards to Applicant's comments regarding the Examiner's interpretation of the term "token", the Applicant notes that the term "token" is intended to be given its plain meaning. However, the Applicant discloses that the term "token" is defined in the specification on page 23, which was also noted by the Examiner in the Non Final Rejection mailed 24 September 2004. The Applicant's comments do not reflect the Examiner's interpretation as shown the Non Final Rejection and as required by MPEP 2111 and 2111.01. If a term is defined in the specification, that term is given its broadest reasonable interpretation as required by MPEP 2111 and is not interpreted by its plain meaning. The words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. See *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir.

2000). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. See *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999)

Therefore, the term "token" is being given its broadest reasonable interpretation as required by MPEP 2111 and as noted in the Non Final Rejection, wherein the term "token" was interpreted to mean an "URL" and/or a "domain name" consistent with the specification's definition of a "token" being "a link" that "do[es] not refer directly to a server/directory/file name at which the data object is located".

The Applicant also argues that the limitation "in exchange for payment" is clear on its face and requires no additional explanation. The Examiner does not agree. The claim does provide any method, machine, or manufacture to practice the limitation and, therefore, does not provide a clear disclosure of this subject matter. The Examiner cannot find such support for this limitation in the claim and the Applicant has not specifically pointed out the support for which the limitation has within the specification, therefore, in view of the Examiner, the limitation does not meet the requirements of 35 USC 112, 1st paragraph. See 35 USC 112, 1st paragraph ("The specification shall contain a written description of the invention, and of the

manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same...").

The Applicant argues that "RFC 1034" does not disclose an intermediary server and a data storage device that are accessible to the intermediary server as defined in the claim. The Examiner is not persuaded by these arguments.

The Applicant argues that the "resolver" as shown in "RFC 1034" is not a "server". RFC 1034 discloses:

"One option for implementing a resolver is to move the resolution function out of the local machine and into a name server which supports recursive queries." (section 5.3.2 "Stub resolvers")

The Applicant also argues that the data storage devices or "hosts" are not accessible through the intermediary server. RFC 1034 discloses:

"Resolvers are programs that interface user programs to domain name servers. In the simplest case, a resolver receives a request from a user program (e.g., mail programs, TELNET, FTP) in the form of a subroutine call, system call etc., and returns the desired information in a form compatible with the local host's data formats." (section 5.1 "Introduction")

"The resolver...may need to consult name servers on other hosts...a resolver may need to consult several name servers..." (section 5.1 "Introduction")

Therefore, given the above disclosures in "RFC 1034" and the broadest reasonable interpretation of the claim as required by MPEP 2111, "RFC 1034" does disclose the limitations of the claim, wherein the intermediary server or "stub resolver" is on a "name server" and the "name server" interfaces client applications or "user programs" to make the data storage devices or "hosts" accessible to the "user program" through the "name server".

Claim Interpretation

The element "token" defined on page 23, lines 3-10 of the specification and recited in claims 7-8, 11-13, 18, and 19 will be given its broadest reasonable interpretation and will be interpreted by the Examiner as a "domain name" and "URL" that is consistent with the disclosures of the specification and the interpretation that those skilled in the art would reach. See MPEP § 2111.

The Applicant has not provided a clear definition for the term "resource locator" recited in claim 9 within the specification. Therefore, the Examiner will interpret this

element by its plain meaning as if the term was interpreted by one of ordinary skill in the art. See MPEP § 2111.01.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 18 recites the limitation "in exchange for payment". This limitation was not described in the specification to enable one skilled in the art to use the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by "Request for Comments (RFC) 1034: Domain Names - Concepts and Facilities" by Mockapetris, P. ("RFC 1034").

Regarding claim 1, "RFC 1034" discloses a data storage system (page 6, section 2.4 "Elements of the DNS") comprising:

a communication network (referred to throughout the reference as "domain" or "local network" or "organization");

a client application ("user program") coupled to the network and generating an access request for stored data ("resource" or "desired information"; page 29, section 5.1 "Introduction", paragraph 1), wherein the client application lacks a priori knowledge of the location of the requested data (page 3, section 2.2 "DNS design goals", specifically the text "We should be able to use names to retrieve host address, mailbox data, and other as yet undetermined information.");

an intermediary server ("resolver", more specifically "stub resolver") coupled to the network to receive the request (page 29, section 5.1 Introduction", paragraph 1; page 32, section 5.3.1 "Stub resolvers");

one or more data storage devices ("hosts") accessible through the intermediary server and having a plurality of data units, including the stored data that is requested by the client application, stored at selected locations therein (page 6, section 2.4 "Elements of the DNS", paragraph "The DOMAIN NAME SPACE and..."; page 29, section 5.1 Introduction", paragraph 1);

a storage server ("name server") having knowledge of the location of the data units in the storage devices and having an interface for communicating with the intermediary server (page 6, section 2.4 "Elements of the DNS", paragraphs "NAME SERVERS" and "RESOLVERS", specifically in "RESOLVERS", "RESOLVERS are programs that extract information from name servers...");

processes within the intermediary server responsive to a received data access request for communicating with the storage server to obtain knowledge about the location of requested data (page 6, section 2.4 "Elements of the DNS", paragraphs "NAME SERVERS" and "RESOLVERS", specifically in "NAME SERVERS", "NAME SERVERS" are server programs which hold information about the domain tree's structure and set information" and specifically in

"RESOLVERS", "RESOLVERS are programs that extract information from name servers in response to client requests"); and

processes within the intermediary server for obtaining the data from the specific location and serving the data to the requesting client application (page 29, section 5.1 Introduction", paragraph 1, specifically "...a resolver receives a request from a user program...and returns the desired information...".

Regarding claim 2, "RFC 1034" discloses the system of claim 1 wherein the data is returned such that the client remains unaware of the specific location of the data. (page 6, section 2.4 "Elements of the DNS", paragraph "From the user's point of view...", specifically "From the user's point of view, the domain system is accessed through a simple procedure...to a local resolver. The domain space consists of a single tree and the user can request information from any section of the tree.")

Regarding claim 3, "RFC 1034" discloses the system of claim 1 wherein the intermediary server has a lower latency connection to the client application than does the storage server. (page 29, section 5.1 "Introduction", paragraphs 2 and 3, specifically "Because a resolver may need to consult several name servers, or may have the requested information in a local cache, the amount of time that a resolver can take to complete can vary quite a

bit..." and "A very important goal of the resolver is to eliminate network delay and name server load...")

Regarding claim 4, "RFC 1034" discloses the system of claim 1 wherein at least some of the storage devices comprise direct attached storage for the intermediary server. (page 6, section 2.4 "Elements of the DNS", paragraph "The DOMAIN NAME SPACE and..."; page 29, section 5.1 Introduction", paragraph 1)

Regarding claim 5, "RFC 1034" discloses the system of claim 1 wherein at least some of the storage devices comprise network attached storage. (page 6, section 2.4 "Elements of the DNS", paragraph "The DOMAIN NAME SPACE and..."; page 29, section 5.1 Introduction", paragraph 1)

Regarding claim 7, "RFC 1034" discloses the system of claim 1 wherein the access request is represented by a token ("host name" or "domain name"). (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE..."; pages 29-30, section 5.2.1 "Typical functions", specifically subsection "1. Host name to host address translation")

Regarding claim 8, "RFC 1034" discloses the system of claim 1 wherein the processes for communicating with the storage server further comprise transmission of a token representing the requested data. (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically

"A query...describes the type of resource information that is desired")

Regarding claim 9, "RFC 1034" discloses the system of claim 1 wherein the processes for communicating with the storage server further comprise processes for receiving a resource locator from the storage server. (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically "...queries for address resources return Internet host addresses")

Regarding claim 10, "RFC 1034" discloses the system of claim 1 wherein the processes for communicating with the storage server further comprise processes for receiving a file name and file path from the intermediary server. (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically "A query...describes the type of resource information that is desired"; page 29, section 5.1 "Introduction", specifically "In the simplest case, a resolver receives a request from a user program (e.g...FTP)...and returns the desired information in a form in a form compatible with the local host's data formats)

Regarding claim 11, "RFC 1034" discloses a method for managing on-network data storage comprising the acts of:

providing a communication network; (referred to throughout the reference as "domain" or "local network" or "organization")

receiving requests for data within an intermediary server from a plurality of external client applications coupled to the network; (page 29, section 5.1 Introduction", paragraph 1; page 32, section 5.3.1 "Stub resolvers")

storing units of data in one or more data storage devices accessible to the intermediary server; (page 6, section 2.4 "Elements of the DNS", paragraph "The DOMAIN NAME SPACE and..."; page 29, section 5.1 Introduction", paragraph 1)

associating each request with a token representing the request; (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE..."; pages 29-30, section 5.2.1 "Typical functions", specifically subsection "1. Host name to host address translation")

sending the token to a storage server coupled to the network and having an interface for communicating with the intermediary server; (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically "A query...describes the type of resource information that is desired")

causing the storage server to return specific location information corresponding to the request associated with the

received token; (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically "...queries for address resources return Internet host addresses")

causing the intermediary server to access the data storage mechanism using the specific location information to retrieve data at the specific location; and delivering the retrieved data to the client application that generated the request. (page 6, section 2.4 "Elements of the DNS", specifically paragraph "The DOMAIN NAME SPACE...", specifically "A query...describes the type of resource information that is desired"; page 29, section 5.1 "Introduction", specifically "In the simplest case, a resolver receives a request from a user program (e.g...FTP)...and returns the desired information in a form in a form compatible with the local host's data formats)

1. Claims 12-19 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6 185 598 B1 to Farber et al.

Regarding claim 12, Farber discloses a method for transferring data between network connected computers comprising the acts of:

storing a data object ("resource") at a specific location in a network-connected storage mechanism ("origin server"); (column 4, lines 40-48)

transmitting a token representing the data object from a first network-connected computer ("client") to an intermediary computer ("reflector"); (column 2, line 65-column 3, line 5)

in the intermediary computer, using the token to identify the specific storage location of the data object; (column 3, lines 5-10)

causing the storage mechanism to transfer the data object to a second network-connected computer ("repeater"). (column 3, lines 18-23)

Regarding claim 13, Farber discloses the method of claim 12 wherein the step of sending the token further comprises sending an identification of the second network-connected computer. (column 3, lines 10-16)

Regarding claim 14, Farber discloses the method of claim 12 wherein the act of transferring the data object comprises transferring the data object to a plurality of network-connected computers. (column 3, lines 35-50)

Regarding claim 15, Farber discloses the method of claim 12 further comprising:

storing copies of the data object at multiple network-connected storage mechanisms; (column 3, lines 35-50)

using the intermediary computer to select one of the multiple network-connected storage mechanisms; (column 3, lines 5-10) and

causing the selected network-connected storage mechanism to transfer the data object to a second network-connected computer. (column 3, lines 35-50, specifically lines 46-50)

Regarding claim 16, Farber discloses the method of claim 12 wherein the step of causing the storage mechanism to transfer the data object to a second network-connected computer comprises:

transferring the data object to a front-end server topologically close to the second network-connected computer; and transferring the data object from the front-end server to the second network-connected computer. (column 3, lines 35-50, specifically lines 46-50)

Regarding claim 17, Farber discloses the method of claim 12 wherein the data object at the specific location is referred to as a primary data object, the method further comprising:

causing the network-connected storage mechanism to proactively redistribut data objects by transferring in addition to the primary data object, one or more data objects that are sequentially related to the primary data object. (column 4, lines 29-32; column 10, lines 39-52)

Regarding claim 18, discloses a data distribution service comprising:

one or more data storage mechanisms holding a plurality of data objects at specific non-public locations; (column 4, lines 40-48)

an interface for receiving tokens ("URL"), the tokens associated with particular ones of the data objects and the tokens lacking specific location information indicating the locations of the data objects in the one or more data storage mechanisms (column 3, lines 51-53; column 5, line 64-column 6, line 5; column 6, lines 40-56); and

in exchange for payment, supplying the specific nonpublic locations of the data objects associated with the received tokens. (column 6, lines 40-56)

Regarding claim 19, Farber discloses a method for version control of a data object comprising:

receiving a token representing a first version of a data object; (column 10, lines 13-67, specifically lines 21-25)

using the token to identify a second version of the data object; (column 4, lines 29-32; column 10, lines 13-67, specifically lines 39-52) and

identifying a specific storage location ("origin server") of the second version data object in response to the received token. (column 10, lines 13-67, specifically lines 39-52)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over "RFC 1034".

Regarding claim 6, "RFC 1034" discloses the system of claim 1.

"RFC 1034" does not disclose wherein at least some of the storage device are configured as a storage area network.

It would have been obvious to one skilled in the art at the time the invention was made to use a storage area network because the Applicant has not disclosed that using the limitation undisclosed in "RFC 1034" provides any sort of an advantage, is used of a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the Internet described in "RFC 1034" as recited in the claim because data transferred between a client and a storage device

traverses the network regardless of the type of storage type used.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be

reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcn

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER